acrylate ranging from 5 % to 40 %, or alternatively composed of a styrene-acrylonitrile copolymer.

- **50.** A composition according to claim 49, characterized in that the said impact additive comprises from:
  - a) 75% to 85% of a crosslinked elastomeric core,
  - b) 25% to 15% of a shell grafted onto the said core.
- 51. A composition according to claim 49, characterized in that the alkyl group of the n-alkyl acrylate of the copolymer (I) has a carbon number ranging from 5 to 8.
- 52. A composition according to claim 49, characterized in that the alkyl group of the alkyl acrylates of the mixture forming part of the copolymer (I) has a carbon number ranging from 4 to 8.

A composition according to claim 49, characterized in that the crosslinking agent is chosen from derivatives possessing at least two double bonds of  $CH_2 = C < vinyl type$ 

- 54. A composition according to claim 49, characterized in that the crosslinking agent is chosen from derivatives possessing one or a number of double bonds of vinyletype and at least one double bond of CH<sub>2</sub>=CH-CH<sub>2</sub> allyl type.
- 55. A composition according to claim 49, characterized in that the crosslinking agent is 1,4-butanediol diacrylate.
- 56. A composition according to claim 49, characterized in that the crosslinking agent is allyl acrylate or methacrylate.
- 57. A composition according to claim 49, characterized in that the nucleus of the crosslinked core has a molar amount of crosslinking agent and of diallyl maleate of between 0.5% and 1.5%.

- 58. A composition according to claim 49, characterized in that the statistical copolymer of the shell has a molar amount of alkyl acrylate of between 10% and 20%.
- 59. A composition according to claim 49, characterized in that the n-alkyl acrylates used to form the copolymer (I) is n-pentyl acrylate, n-hexyl acrylate, n-heptyl acrylate and n-octyl acrylate.
- 60. A composition according to claim 49, characterized in that the n-alkyl acrylate for forming the copolymer (I) is n-pentyl acrylate.
- 61. A composition according to claim 49, characterized in that the n-alkyl acrylate for forming the copolymer (I) is n-hexyl acrylate.
- 62. A composition according to claim 49, characterized in that the n-alkyl acrylate for forming the copolymer (I) is n-heptyl acrylate.
- 63. A composition according to claim 49, characterized in that the n-alkyl acrylate for forming the copolymer (I) is n-octyl acrylate.
- 64. A composition according to claim 49, characterized in that the linear or branched alkyl acrylates constituting the mixture of alkyl acrylates used for forming the copolymer (I) is ethyl acrylate, n-propyl acrylates, n-butyl acrylate, amyl acrylate, 2-methylbutyl acrylate, 2-ethylhexyl acrylate, n-hexyl acrylate, n-octyl acrylate, n-decyl acrylate, n-dodecyl acrylate and 3,5,5-trimethylhexyl acrylate.
- 65. A composition according to claim 64, wherein the mixture contains an amount by weight of n-alkyl acrylate at least equal to 10% by weight of the mixture of alkyl acrylates.
- 66. A composition according to claim 65, wherein the amount by weight of nalkyl acrylate is between 20% and 80% by weight of the mixture of alkyl acrylates.